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Oregon
John A. Kitzhaber, M.D., Governor

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February 25, 2002

Drew Gilpin
Manager Environmental Services
Oregon Steel Mills, Inc.
P.O. Box 2760
Portland, Oregon 97208

Re: DEQ Comments - Pre – Remedial Investigation Assessment Report
Oregon Steel Mills, Inc.
Portland, Oregon
ECSI Site 141

Dear Mr. Gilpin:

The Oregon Department of Environmental Quality (DEQ) reviewed the January 18, 2002 *"Pre-Remedial Investigation Assessment Report"* for the Oregon Steel Mills (OSM) Rivergate site. This report was prepared by E^{x}ponent. E^{x}ponent's report was well organized, generally follows DEQ's published guidance documents, and provides a nice summary of the current and historical environmental conditions at the site.

OSM's Pre-Remedial Investigation (Pre-RI) documents the release of hazardous substances to the environment and that these substances may pose an unacceptable risk to human health and the environment. Therefore, a Remedial Investigation (RI) and Risk Assessment (RA) must be completed for the site in accordance with the Voluntary Agreement between DEQ and OSM.

DEQ accepts this Pre-RI Assessment Report as final completion of the Pre-RI and equivalent to an Expanded Preliminary Assessment (XPA). While the document is accepted as written, DEQ does not agree with, or concur with, all the opinions or conclusions contained in the report. DEQ's comments are presented below. It is our expectation that our comments will be addressed or incorporated into future documents.

General Comments

A. **Areas of Potential Concern (AOPC) for the Site.** The report provides a nice summary of post 1997 spills, petroleum storage tank issues, and previous investigations (Pre-RI Tables 5 and 6). In general, DEQ concurs with the AOPC identified in the report. However, DEQ has identified four (4) areas at the site that have not been previously investigated and need to be included in the RI. These areas are described below. In addition, DEQ believes clarification is needed on some of the AOPCs included in the report. DEQ's modifications to the AOPC list is summarized in the Table 1 (attached). Table 2 identifies AOPCs that DEQ agrees generally do not appear to pose an unacceptable risk, based on available information and may be eliminated from the RI at this time.

Additional APOC

- *Shoreline fill area.*
  The attached 1970 aerial photograph indicates that a portion of the OSM property bank was filled with suspect materials of unknown origin. It is also unknown whether this material may contain hazardous substances and be a historic, current, or future potential source of contaminants to the Willamette River. A 1997 dredge permit for the site included the stabilization of approximately 2,260 feet of "severely eroding bankline." Because of the unknown nature of the fill material this area is considered an AOPC.

- *Former pond west of the DRD pond.*
  In addition to the shoreline fill in the 1970 aerial photograph, there was a former pond located just west of the former DRD pond. The use of this pond is unknown. The pond is present in available aerial photographs of the site starting around the beginning of the facility construction. In the 1970 aerial photograph, a large amount of debris or other material is present along the edges of the pond. Additional information is needed regarding the construction, operation, and removal of this pond and the material identified around the feature.

- *Existing slag processing area (including process and storm water runoff).*
  Slag is a waste product from the scrap melting process. The slag, once separated and cooled is processed (e.g., crushed) and used or sold as aggregate. Historically OSM slag processing produced process water that was placed in the natural pond just north of the current OSM property. This pond has been referred to as the "former blue lagoon" (due to the clarity and apparent color of the water in the pond). We understand that OSM previously owned the property, located immediately north of the current facility, that included the pond from 1971 to 1985. The use of the pond for slag process water was continued until approximately 1994 when the pond was filled. The pond apparently had no outlet. A soil, sediment, and groundwater investigation was completed for the former blue lagoon site by the Port of Portland. The initial groundwater data from the investigations indicated the water had a pH of up to 11 and the groundwater in the area of the pond contained elevated concentrations of metals. Because no information is presented regarding the current slag operations process water and runoff combined with the data from the adjacent investigation of former process water, groundwater in the vicinity of the slag operation is considered an AOPC.

- *Coolant/Water Treatment Pond (south of the Slab Scarfing Yard).*
  DEQ's review of the DRD Pond groundwater data and water level maps identified a groundwater high adjacent to the coolant pond located south of Slab Scarfing Yard. This high may be seeping from the coolant pond. Because of the lack of groundwater information in this area of the site, potential contaminated groundwater from sumps placed in the system, and historic data indicating seepage may be occurring from the coolant pond this area should be listed as an AOPC at this time.

Clarifications of Identified AOPC

- *Existing storm water collection system (sampled and discussed in this Pre-RI Report).*

For completeness the storm water collection system should be placed on the list of AOPC. It is recognized this area is currently being evaluated by OSM.

- *Table 5 "O" Petroleum Contamination in Dredge Sediments- 1998.*
This APOC should include both the data collected from the pre-dredging sampling conducted in the fall of 1997 and the data collected from the impacted sediments samples collected during dredging activities in the fall of 1998. In addition, it appears that only the 1997 data is presented in Table 15 "Existing Maximum Concentration." Concentrations for several compounds from the 1998 data set exceeded those presented for this APOC.

- *Table 5 "F" Waste Solvent Container Area (MEK) - 1985 Inspection.*
The soil issues in this area appear to have been resolved. However, the potential for groundwater impacts from the release of solvents in this area have not been evaluated. Because methyl ethyl ketone (MEK) is very soluble (solubility is 256,000 mg/L) it can migrate through infiltration and potentially impact groundwater conditions at a site. MEK was detected in two (2) groundwater monitoring wells near the closed landfill (area L) in 1993, and there is a potential for groundwater issues to exist associated with this historic waste solvent container area release. Therefore, this area should be retained as an AOPC due to potential groundwater impacts. Future investigations of this issue could incorporate the paint waste pond which has similar potential groundwater issues.

- *Table 5 "L" Landfill.*
DEQ requested a review of the available landfill groundwater data be completed prior eliminating this APOC (DEQ comment letters dated August 9, 2000, May 30, 2001 and August 24, 2001). A review of this information was not presented in this report. DEQ's review of the landfill study reports determined that the groundwater data was screened against human health screening values but not against screening values for potential ecological receptors. A preliminary review of the groundwater data indicates some metals exceed the ecological screening values. However, it is unclear if these results are associated with the landfill or possible upgradient contaminant source(s) (e.g., slag processing area). Therefore, based upon the initial screening criteria the groundwater in this area of the site should remain an AOPC.

- *Spills "AA and CC"*
These spills should be included on the AOPC list for completeness. It is recognized by DEQ that these areas are being addressed by OSM using DEQ's September 1999 Guidance document "Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites (RBDM)."

DEQ does not agree with the statement in the text and in the footnote of Table 6 that affected groundwater is limited and not migrating to the Willamette River. There is a dissolved contaminant plume that is migrating beyond OSM's monitoring well network in both areas. In addition, not all the contaminants of potential concern (COPCs), as identified in Appendix A of the RBDM guidance, have been evaluated at these releases and an ecological evaluation has not been conducted. Therefore, based upon the incomplete data set, it is unclear at this time, whether groundwater concentrations

associated with these releases pose an unacceptable risk at the site. Therefore, based upon the initial screening criteria these areas should remain identified as AOPC.

- *Spills "MM and NN"*
  The text of the report indicates that groundwater in the area of these spills is required further evaluation during the RI. However, Table 6 indicates these areas have been addressed. This area should be included as an AOPC for groundwater issues.

Action: It is DEQ's expectation that the AOPCs listed in Table 1 are carried forward into the RI.

B. **Preliminary Prioritization of the AOPC.** DEQ requests that OSM provide DEQ with a prioritization of the AOPC based on its potential to be a current or future sources of contaminants to the River. This will assist in prioritizing RI data collection. Table 1 (attached) provides DEQ's preliminary prioritization of the AOPC. DEQ recommends that OSM consider dividing the site into several operable units for the RI by combining several as appropriate (such as spills in areas GG and HH that occurred in the same location).

Action to be Completed in the RI Proposal: Incorporate prioritization of AOPC into the RI Proposal and consider RI operable units.

C. **List of Contaminants of Interests (COIs) for each AOPC.** The list of potential COIs included in the report for each AOPC is incomplete. A more comprehensive list should be included in the RI proposal and work plan. For example, COIs for the former oil sump area should be expanded based on the information presented in Appendix A. Historical documentation indicates wastes other than petroleum hydrocarbons were placed in the sump and then burned. These wastes include paint cleaning products, manufactured gas plant waste, and sludge containing chemicals from ship cleaning operations. This information suggests that some testing for dioxins and furans should be included in the RI.

Action to be Completed in the RI Work Plan: DEQ is requiring that a comprehensive COI list be presented in the RI Work Plan. In our previous request for this information an example table was provided for clarity (DEQ comment letter dated May 30, 2001). The COI list must identify all the potential contaminants associated with an AOPC including identification of groups of compounds (such as, polycyclic aromatic hydrocarbons [PAHs], or gasoline, diesel, or waste oil-related constituents, etc.) and/or individual compounds where possible. DEQ will not make a determination regarding the completeness of the investigation of a potential source area until a complete list of COIs has been prepared.

D. **Persistent, Bioaccumulating Toxins (PBTs).** Please provide a Table of PBTs that are COIs for the site. PBTs that have been detected and have a potentially complete pathway to the ecological receptors may not be screened out during the preliminary screening phase of the project. As a starting point for the PBT list, OSM should refer to DEQ's recently revised Level II ecological risk assessment document, the federal list of PBTs, and contaminants with a K_{ow} of greater that 3.5.

Action to be Completed in the RI Work Plan:: Please submit the requested table of PBTs in the RI Work Plan.

E. **Preliminary Screening of COIs for each AOPC.** As previously discussed with OSM, in specific cases a *preliminary* evaluation of the available data may be used to eliminate or screen out certain COIs for specific AOPC. However, DEQ does has a well-defined process for screening COIs for both human health risk evaluation and for ecological risk evaluation (refer to the DEQ risk assessment guidance(s)). It is our expectation that during the course of the RI work all the appropriate risk assessment steps, as presented in the guidance, will be completed for both human and ecological receptors. Criteria for removing a COI at this preliminary phase of the investigation may include the following:

- COI is not detected in source area (note: detection limits must be at or below appropriate screening concentrations);
- Available data is "representative" of source area material;
- Contaminant is not a PBT;
- Contaminant is naturally occurring and present at a concentration less than background;
- Contaminant concentration is less than appropriate screening level value (s) (note: some contaminants may have multiple screening values depending upon potentially complete risk pathways; screening needs to consider potential additive risks)
- Screening level value must be available.

Using the above criteria DEQ, in general, concurs that it may be appropriate to eliminate the COIs listed below. However, DEQ reserves making a final decision until it is determined how source areas will be evaluated and if operable units will be used in the RI.

Table 13

"Oil Sump" – Insufficient data to remove any contaminants from the COI list at this time.

"G" – VOC's for soil pathway only. Potential impacts to groundwater from paint wastes have not been conducted and will require VOC analysis.

"M" – Silver and selenium

"N" – VOC's for soil pathway only. Potential impacts to groundwater from release(s) have not been conducted and will require VOC analysis.

Table 14

"D1 and D3" – Screening indicated that there have been a release from one or both of these sources. Because it appears that groundwater sample B-13 is downgradient from source D3 (two gasoline underground storage tanks [USTs]), benzene, toluene, ethylbenzene and xylenes may be eliminated from the D3 AOPC. However, numerous other volatile organic compounds (VOCs) have not been analyzed in soil or groundwater in accordance with DEQ's RBDM. Additional testing will be required.

Table 15

The only contaminants that meet the above screening criteria are antimony, selenium, silver and thallium. Although silver was detected in the storm sewer sediment and in the sediment below the OSM outfalls the concentrations are less than the ecological screening values and silver is not a PBT.

F. **Media potentially impacted by AOPC.** Table 3 presents DEQ's initial evaluation of what types of data are needed to define the nature and extent of identified source areas and for evaluation in the risk assessment.

Specific Comments

1. **Section 1.4.1.** As noted in General Comment A, the slag processing area, is in the northeast corner of the site and is part of the current operations that was not described in the Pre-RI.

2. **Section 1.4.2, Page 1-8.** Based on the summary of the materials used in the Steel production bullet the specialty metals titanium and boron are required on the initial list of COIs where appropriate. These COIs should be discussed in the RI Proposal or work plan.

3. **Section 1.4.3, Page 1-10**. It is noted that groundwater seepage into buildings is added to the influent sources to the central water treatment system. Please provide a map showing the locations of the groundwater sumps and a discussion of the sump operation (frequency, piping diagrams) in the RI Work Plan. Has the quality of this water been tested?

4. **Section 2.2, Page 2-6, 2nd paragraph, last sentence.** DEQ notes that OSM has a very aggressive spills response program that appears to be well implemented. As a result, visually affected soils are rapidly removed greatly reducing the impact of the release. However, DEQ does not agree with the statements that suggest that the removal of affected soils results in insufficient time for migration of COIs. Our disagreement is based on the eight (8) spill reports in the DEQ file where confirmation samples were collected following the excavation of visually impacted soil. Five (5) locations detected significant concentrations of petroleum hydrocarbons (>1,000 milligrams per kilogram [mg/kg]). It is unknown at this time if these remaining contaminants are migrating. Petroleum issues associated with spills could potentially be further addressed in the future with additional best management practices.

5. **Section 4.1, Page 4-2, 1st paragraph, Portland Harbor Baseline Values.** The statement "...DEQ *now* rejects the use of..." is incorrect. For clarification, DEQ does not accepted the use of the Portland Harbor baseline values as equivalent to naturally occurring background concentrations and has not indicated they are appropriate for use in risk evaluation purposes. In fact, the development and use of the baseline values is clearly described in this report on page 4-1 "...for identifying and prioritizing sites in the area (Portland Harbor)..."

6. **Section 4.1, Page 4-2, 3rd paragraph.** In general, DEQ agrees with the logic and the approach presented regarding the use of industrial standards for screening potential risks to human health and the potential lack of ecological receptors on the upland portions of the site (with the possible exception of the actual river bank area itself). However, the RI agreement does requires OSM to formalize these results by completing a land use determination (LUD), a beneficial water use determination (BWUD) and an ecological risk assessment (at a minimum a Level I-Scoping is required).

7. **Section 4.1. Page 4-2. 3rd paragraph.** Soils that could become sediment via overland transport to catch basins and outfalls should be compared to ecological screening numbers

for sediment. Soils that have no migration pathway to the river should be compared to the appropriate PRG in the human health risk assessment.

8. **Section 4.1, Page 4-3, 1st paragraph, 1st sentence.** DEQ does not believe adequate data is available at this time to support the conclusions regarding groundwater conditions at the point of discharge to the Willamette River. DEQ does believe that understanding groundwater discharge and potential impacts to the Willamette River and its sediments should be one of the primary objectives of the groundwater evaluation in the RI.

9. **Section 4.1, Page 4-3, 1st paragraph, 2nd sentence.** DEQ's cleanup program does not accept dilution and attenuation unless the discharge is permitted and does not apply to PBTs.

10. **Section 4.1, Page 4-3, 1st and 2nd paragraph - Screening Values.** Based on the discussions in these two paragraphs it appears the purpose and objective of the screening level evaluation needs to be clarified.

    DEQ's screening level values are *"not"* intended for prediction of adverse affects levels. The screening level values are designed to be protective of human health and the environment. Therefore, site concentrations' less than the screening value indicate the contaminant does not pose an unacceptable risk. However, concentrations above the screening value do not necessarily indicate that the contaminant poses an unacceptable risk or that remediation is required; exceedances only indicates that further evaluation is needed.

11. **Section 4.2, Page 4-3, 2nd paragraph**. DEQ is developing sediment-screening numbers for the protection of human heath in Portland Harbor. Once these numbers have been developed, we will provide them to you for inclusion in future submittals.

12. **Section 4.2. Page 4-6, 3rd and 4th paragraph**. The discussion states that contaminants "might" be retained as COIs if they exceed DEQ's ecological risk screening numbers. However, Tables 13 and 15 indicate several compounds will be "retained as a COI". Screening is intended to be a conservative step. If a compound exceeds a screening number, the compound should be retained as a COI for the RI. As previously noted, discussions about Portland Harbor baseline concentrations are not valid in this analysis, especially in the context of source control.

13. **Section 5.2, 2nd paragraph, 1st sentence.**. The discharge of groundwater to surface water is considered a beneficial use of the groundwater. Complete a BWUD in accordance with DEQ guidance dated July 1, 1998, and the surface water recharge needs to be one of the listed beneficial uses. Completing the BWUD should be identified as a task in the RI Work Plan.

14. **Section 5.1, Page 5-2, 2nd Paragraph**: Bioaccumulation in fish and consumption by humans should also be discussed as a pathway.

15. **Tables 10 and 11.** The contaminant tetrachloroethane is listed, and DEQ believes this should be tetrachloroethene (PCE). The associated screening levels should be verified and revised as appropriate in future documents.

16. **Tables 10 through 15.** In future submittals screening values for individual PAHs and PCBs should be included in the screening values. In addition, compounds should be compared to DEQ's bioaccumulation screening numbers, as appropriate.

17. **Table 12.** DEQ has two sediment screening levels for some contaminants, a toxicity value and a bioaccumulation value. No bioaccumulation values are presented in this table, yet values exist in the guidance document for several of the COIs identified in OSM's tables. Please present both screening values in future documents.

18. **Figure 11, Areas of Potential Concern:** What is the basis for identifying the areas of concern for potential storm water runoff? At this point in the investigation potential storm water runoff areas should include the drainage areas.

19. **Figure 12, Conceptual Site Model, Human Health.** The onsite worker and onsite construction worker may be exposed to contaminated sediments (e.g., incidental ingestion, dermal contact, and inhalation). These should be shown as a potentially complete pathway. Also, please note that it is DEQ's expectation that the potential volatilization of VOCs from soil or groundwater to indoor and outdoor air will be addressed under the inhalation pathway.

    Footnote (b) indicates that there are no beneficial uses of groundwater at the site. A beneficial water use determination has not been completed for the facility and groundwater discharge the river is considered a beneficial water use. This could have implications in a human health assessment through the fish ingestion pathway.

20. **Figure 13, Conceptual Site Model, Ecological.**

    Birds: Birds such as shorebirds and wading birds can be exposed to sediments through incidental ingestion (feeding) and dermal contact.

    Aquatic organisms and birds: A complete exposure pathway should be shown for ingestion of biota (fish / macroinvertebrates).

21. **Requested Data.** DEQ requested OSM provide chemical information regarding current and historical grinding fluids used at the site for the operation and maintenance of the rollers in the rolling mill. Because there is significant maintenance associated with the rolling mill processes and it appears large volumes of this fluid may be used or have been used, specific information on the process and fluids used to requested to complete the identification of potential hazardous substances at the site. Please provide this information in a brief letter or technical memorandum prior to submitting the RI Work Plan.

22. **Requested Data.** Please supply DEQ with a copy of the reference report "Preliminary Foundation Investigation, Proposed Steel Plant, Rivergate Area" prepared by Dames and Moore dated January 16, 1967.

Summary and Next Steps

As stated earlier, the report was well organized and provides a nice summary of the current and historical environmental conditions at the site. The next step for the project will be the submittal

of the RI Proposal. The purpose of the RI Proposal is to provide an approach and outline for the detailed work plan, and DEQ concurrence on the big picture project components of the RI. OSM's RI Proposal should (at a minimum):

- prioritize the evaluation of potential areas of concern in relationship to upland contaminant sources and potential source control measures;
- present OSM's general approach and rationale to investigating the multiple potential source areas;
- present a general description of each proposed RI phases, including the goals and objectives of each.;
- present the conceptual site exposure model (incorporating comments from this comment letter) and a conceptual hydrogeologic model and transport mechanisms; and
- provide an estimated schedule for implementation of the RI.

The "Agreement for the RI and Source Control Measures, Scope of Work," between DEQ and OSM requires that a RI Proposal be submitted to DEQ within 30 days from receipt of these comments. Therefore, the RI Proposal should be submitted no later than April 2, 2002.

If you have any questions or concerns regarding site issues please call me at (503) 229-6915 or e-mail me at brodyheine.bruce@deq.state.or.us.

Sincerely,

Bruce Brody-Heine

Bruce Brody-Heine, R.G.
Project Manager/Hydrogeologist
Voluntary Cleanup/Portland Harbor

Attachments
Table 1
Table 2
Table 3
Aerial Photograph -1970

cc: David Livermore/E[x]ponent
Jennifer Peterson, DEQ/NWR
Rod Struck, DEQ/NWR
ECSI File 141 (2)

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Table 1
Areas of Potential Concern
Portland Harbor RI and Source Control Measures
Oregon Steel Mills
DEQ ECSI # 141

Areas of Potential Concern

	Historical and Current			***Prioritization***
	A	Former Oil Sump		*H*
	C2	1982 PCB Release - (same location as I)		*M*
	D1	Oil/waste oil UST		*L*
	D2	Gas/Diesel USTs		*L*
	D3	Gasoline USTs		*L*
	D4	Gas/Diesel USTs		*L*
	E	PCB Release - 1985		*M*
*	F	MEK Waste Solvent -1985 Inspection		*M*
	G	Former Paint Waste Ponds		*M*
	H	1986 Creosote encountered during dredging		*H*
	I	PCB release - cleanup in 1987 and 1989 - (same location as C2)		*M*
	K1, K2	Transformer removal /Retrofit 1990-1992		*M*
*	L	Landfill Study 1993 and 1995 - closed 1997		*M*
	M	Scrap Yard - 1994 soil sampling		*L*
	N	Mosely Shear 1996 sampling		*M*
	O	Pet. Contamination - 1997 sampling and 1998 dredging		*H*
new		*Shoreline Filling Area (1970 aerial photo)*		*H*
new		*Former Storm Water Pond? Area -West of Former DRD Pond*		*L*
new		*Current Slag Processing Area (process/water runoff)*		*M*
new		*Existing Storm Water Collection System*		*H*
new		*Coolant/Water Treatment Pond*		*M*
	Spills			
*	AA	Gasoline USTs	Gasoline	*H*
*	CC	AST	Gasoline	*M*
	DD	Melt Shop Equip	Hydraulic Oil	*L*
*	GG	Reheat Furnace	Hydraulic Oil - (same location as HH)	*L*
	HH	Comb Mill building	Hydraulic Oil	*L*
	II	Fuel Pump	Diesel	*M*
*	JJ	Roller Mill	Hydraulic Oil - (possibly same equipment as QQ)	*M*
	KK	Fuel Pump -Diesel	Diesel	*M*
	LL	Locomotive	Diesel	*L*
	MM	Scale Pit	petroleum hydrocarbons	*H*
	NN	Scale Pit	petroleum hydrocarbons	*H*
	OO	Rolling Mill	Hydraulic Oil	*L*
	QQ	North shipping bay	Hydraulic Oil - (PCBs)	*M*

Notes:

*	Differs from Exponent Pre-RI Assessment Report
new	Added Area of Potential Concern not included in Pre-RI Assessment Report
H	High Priority
M	Medium Priority
L	Low Priority

Table 2
Areas of Potential Concern Eliminated from RI
Portland Harbor RI and Source Control Measures
Oregon Steel Mills
DEQ ECSI # 141

AOPC - Eliminated from RI

Historical and Current		
B	Former DRD Ponds	
* C1	1982 PCB Release	
J	PCB release -1990/1991	
	RCRA 1992 rpt - 6 SWMU	
P	Second Landfill - closed 2001	
Spills		
BB	Vacuum Degasser	Sluge
EE	Fuel in Buckets	Diesel
FF	Temporary Drum	Used Motor/Hydraulic Oil
PP	Fork List	Hydraulic Oil

Notes:

* Differs from Exponent Pre-RI Assessment Report

Table 3
Areas of Potential Concern
Portland Harbor RI and Source Control Measures
Oregon Steel Mills
DEQ ECSI # 141

Media Potentially Impacted by Release in AOPC

			Surface Soil	Subsurface Soil	Groundwater	Sediment
Historical and Current						
A	Former Oil Sump			✓	✓	✓
C2	1982 PCB Release - (same location as I)		✓			✓
D1	Oil/waste oil UST			✓	✓	
D2	Gas/Diesel USTs			✓	✓	
D3	Gasoline USTs			✓	✓	
D4	Gas/Diesel USTs			✓	✓	
E	PCB Release - 1985		✓			✓
F	MEK Waste Solvent -1985 Inspection		*Done*	*Done*	✓	
G	Former Paint Waste Ponds			✓	✓	
H	1986 Creosote encountered during dredging					✓
I	PCB release - cleanup in 1987 and 1989 - (same location as C2)		✓			✓
K1, K2	Transformer removal /Retrofit 1990-1992		✓			✓
L	Landfill Study 1993 and 1995 - closed 1997				✓	
M	Scrap Yard - 1994 soil sampling		✓	✓	✓	✓
N	Mosely Shear 1996 sampling		✓	✓	✓	✓
O	Pet. Contamination - 1997 sampling and 1998 dredging					✓
	Shoreline Filling Area (1970 aerial photo)		✓	✓		
	Former Storm Water Pond? Area -West of Former DRD Pond			✓	✓	
	Current Slag Processing Area (process/water runoff)		✓		✓	
	Existing Storm Water Collection System		✓		✓	✓
	Coolant/Water Treatment Pond			✓	✓	
Spills						
AA	Gasoline USTs	Gasoline	*Done*	*Done*	✓	
CC	AST	Gasoline	*Done*	*Done*	✓	
DD	Melt Shop Equip	Hydraulic Oil	*Done*	✓*	✓	
GG	Reheat Furnace	Hydraulic Oil - (same location as HH)	*Done*	✓*	✓	
HH	Comb Mill building	Hydraulic Oil	*Done*	✓*	✓	
II	Fuel Pump	Diesel	*Done*	✓*	✓	
JJ	Roller Mill	Hydraulic Oil - (possibly same equipment as QQ)	*Done*	✓*	✓	✓*
KK	Fuel Pump -Diesel	Diesel	*Done*	✓*	✓	
LL	Locomotive	Diesel	*Done*	✓*	✓	
MM	Scale Pit	petroleum hydrocarbons	*Done*	*Done*	✓	
NN	Scale Pit	petroleum hydrocarbons	*Done*	*Done*	✓	
OO	Rolling Mill	Hydraulic Oil	*Done*	✓*	✓	
QQ	North shipping bay	Hydraulic Oil - (PCBs)	*Done*	✓*	✓	✓*
	Reheat Furnace	*Hydraulic Oil - (same location as GG and HH)*	*Done*	✓*	✓	

Notes:

AOPC	Area of Potential Concern
UST	Underground storage Tank
AST	Above-ground Storage Tank
PCBs	Polychorinated biphenols
Done	Spill response removed this material, and it is assumed that media in AOPC has been addressed
*	Future location of contaminated material may occur at surface (such as future excavation work leaving contaminated soil at surface- PBTs). Could be controlled through institutional controls (such as soil management plans).

5-5-1970

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PORTLAND, OREGON

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6136-40

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Use No. above to Identify Photo.

This Photograph Was Taken 5-5-70

FAX Cover Sheet

To: Drew Gilpin - OSM / David Livermore - Exponent

Office: OSM : Exponent

Phone: _____

Fax: 503 240-5775 (503) 636-4315

Date: Feb. 25, 2002

_____

From: Bruce Brody-Heine

Office: NWR - VCP

Phone: (503) 229-6915

Number of Pages (including this cover sheet): 14

DEQ

State of Oregon
Department of
Environmental
Quality

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2020 SW 4th Avenue
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Portland, OR 97201
Phone: (503) 229-6361

Return Fax:(503)
229-6899

www.deq.state.or.us

Comments:

Gentleman,

Nice report, Thanks for the effort put into it. Attached are DEQs comments. A hard copy is in the mail.

Please call with any questions.

Bruce Brody-Heine

Received
OK ✓ Drew G.
OK ✓ David L.